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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/152,008	09/11/1998	SIG H. BADT JR.	ALCA1100-6	8622

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EXAMINER

HARPER, KEVIN C

ART UNIT PAPER NUMBER

2666

DATE MAILED: 07/31/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/152,008

Applicant(s)

BADT, SIG H.

Examiner

Kevin C. Harper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 8-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-6 and 8-10 is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. Applicant argued that Brady does not disclose transmitting topology information. However, in Figure 5, step 24, information in an inherently stored topology table is transmitted to neighboring nodes (col. 4, lines 18-21).
2. Applicant argued against examiner's taking of Official Notice that a routing table contains port numbers to identify links. In response, Examiner notes that Suzuki (US 5,796,736; Figure 3 and 11) discloses routing tables containing port numbers to identify link connections.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 11-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. (US 5,646,936) in view of Brady (US 6,041,049)..

3. Regarding claims 11-12 and 15-16, Shah discloses a method of network restoration comprising mapping a topology of spare capacity (Figure 5; col. 5, lines 66-67) of several spare links interconnecting several nodes (col. 6, lines 16-20). However, Shah does not disclose transmitting the information to an origin node. Brady discloses transmitting topology information to an origin node (Figure 1; Figure 5, step 24; col. 2, lines 48-67). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to exchange spare capacity information in the invention of Shah in order to provide each node in the network with the available spare capacity of the network. Further, Shah in view of Brady does not disclose identifying port numbers. One skilled in the art would recognize that a cross-connect switch typically has port numbers identifying connections to different working paths and spare

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paths (Shah, col. 5, lines 18-22). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to identify the spare capacity by port number in the invention of Shah in view of Brady in order to distinguish between the various links connected to the node.

4. Regarding claims 13 and 17, Shah in view of Brady discloses a message (Shah, Figure 8) including an identification of a node (item 703) and a field indicating that the node is a custodial node (item 703; col. 7, lines 3-6). However, Shah in view of Brady does not disclose that the message contains port numbers. One skilled in the art would recognize that a cross-connect switch typically has port numbers identifying connections to different working paths and spare paths (Shah, col. 5, lines 18-22). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to identify the spare capacity by port number in the invention of Shah in view of Brady in order to distinguish between the various links connected to the node.

Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah et al. in view of Brady et al., as applied to claims 13 or 17 above, in further view of Fisher (US 4,941,089).

5. Regarding claim 14 and 18, Shah in view of Brady discloses a message type field for a packet (shah, Figure 8, item 701). However, Shah in view of Brady does not disclose that the message type field indicates the packet is a continuously exchanged keep-alive packet. Fisher disclose a message type field that indicates a continuously exchanged keep-alive packet (col. 29, lines 28-33; col. 33, lines 23-24). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have a message type field to identify a packet as a keep-alive packet in the invention of Shah in view of Brady in order for a receiving node to identify the packet and perform the proper operation on the packet (i.e. allow the status of the link to indicate activity and not a fault or failure).

Allowable Subject Matter

6. Claims 1, 3-6 and 8-10 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139. The examiner can normally be reached weekdays, except Wednesday, from 9:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463. The fax number for Technology Center (TC) 2600 is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office for TC 2600 at 703-306-0377.

Kevin C. Harper



July 28, 2003